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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,564	08/27/2003	Messay Amerga	020673	8247
23596 7590 06/25/2009 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121				
EXAMINER SAFAIPOUR, BOBBAK				
ART UNIT 2618		PAPER NUMBER		
NOTIFICATION DATE 06/25/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/650,564

**Applicant(s)**

AMERGA, MESSAY

**Examiner**

BOBBAK SAFAIPOUR

**Art Unit**

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This Action is in response to Applicant's response filed on 03/05/2009. Claims 1-21 are still pending in the present application. **This action is made FINAL.**

#### ***Response to Arguments***

Applicant's essentially argue that neither Amerga nor Bamburak teach or suggest "to override opening the servicing cell transeiving gap for searching outside of the serving cell".

The Examiner respectfully disagrees. Bamburak discloses that when downloading the search schedule in step 80, frequency bands previously searched are removed from the downloaded schedule (*read as gap*) so as to avoid searching bands that have already been searched. For example, bands searched in the search routine discussed with regard to FIG. 4 and the cellular band search discussed with regard to step 74 are removed from the search schedule (*read as outside the serving cell*). After the modified search schedule has been loaded, a search pointer is initialized to point to the first band identified by the modified search schedule. (figures 4-5; paragraph 27)

As a result, the argued features are written such that they read upon the cited references; therefore, the previous rejection still applies.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Amerga et al** (hereinafter “**Amerga**”; US 2003/0231605) in view of **Steudle** (US 6,810,019 B2).

Consider **claim 1**, Amerga discloses an apparatus, comprising: a search scheduler for scheduling a search and for generating a frequency switch blocking signal (abstract; figures 2, 4-9; paragraphs 36-39), but fails to disclose a frequency controller for generating frequency switch commands, receiving the frequency switch blocking signal, and suppressing the generation of frequency switch commands when the frequency switch blocking signal is asserted.

In related art, Steudle discloses a frequency controller for generating frequency switch commands, receiving the frequency switch blocking signal, and suppressing the generation of frequency switch commands when the frequency switch blocking signal is asserted. (figure 3; abstract; col. 5, lines 44 to col. 6, line 19; A gap is left for measuring inter-frequency parameters.)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Steudle into the teachings of Amerga by optimizing the

distribution of the measurement gaps between various mobile stations, the interference caused by mobile stations to each other at a higher transmission is reduced.

Consider **claim 13**, Amerga discloses a first Integrated Circuit (IC), responsive to a frequency switch signal generated in a second IC, the second IC comprising: a search scheduler for scheduling a search and for generating a frequency switch blocking signal (abstract; figures 2, 4-9; paragraphs 36-39); and a first IC comprising: a frequency synthesizer to receive the frequency switch signal from the second IC and to generate an output signal, the frequency of the output signal changing from a first frequency to a second frequency in response to the frequency switch signal (paragraphs 30-39).

Amerga fails to disclose a frequency controller for generating a frequency switch signal comprising frequency switch commands, receiving the frequency switch blocking signal, and suppressing the generation of frequency switch commands when the frequency switch blocking signal is asserted.

In related art, Steudle discloses a frequency controller for generating a frequency switch signal comprising frequency switch commands, receiving the frequency switch blocking signal, and suppressing the generation of frequency switch commands when the frequency switch blocking signal is asserted. (figure 3; abstract; col. 5, lines 44 to col. 6, line 19; A gap is left for measuring inter-frequency parameters.)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Steudle into the teachings of Amerga by optimizing the

distribution of the measurement gaps between various mobile stations, the interference caused by mobile stations to each other at a higher transmission is reduced.

Consider **claim 14**, Amerga discloses a wireless communication device, comprising: a processor for scheduling a search (abstract; figures 2, 4-9; paragraphs 36-39), but fails to disclose generating a frequency switch blocking signal; generating frequency switch commands; and suppressing the generation of frequency switch commands when the frequency switch blocking signal is asserted.

In related art, Steudle discloses generating a frequency switch blocking signal; generating frequency switch commands; and suppressing the generation of frequency switch commands when the frequency switch blocking signal is asserted. (figure 3; abstract; col. 5, lines 44 to col. 6, line 19; A gap is left for measuring inter-frequency parameters.)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Steudle into the teachings of Amerga by optimizing the distribution of the measurement gaps between various mobile stations, the interference caused by mobile stations to each other at a higher transmission is reduced.

Consider **claim 17**, Amerga discloses a method of searching in the presence of frequency gaps, comprising: scheduling a search (abstract; figures 2, 4-9; paragraphs 36-39), but fails to disclose suppressing frequency switches during the scheduled search.

In related art, Steudle discloses suppressing frequency switches during the scheduled search (figure 3; abstract; col. 5, lines 44 to col. 6, line 19; A gap is left for measuring inter-frequency parameters.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Steudle into the teachings of Amerga by optimizing the distribution of the measurement gaps between various mobile stations, the interference caused by mobile stations to each other at a higher transmission is reduced.

Consider **claim 20**, Amerga discloses an apparatus, comprising: means for scheduling a search (abstract; figures 2, 4-9; paragraphs 36-39), but fails to disclose means for suppressing frequency switches during the scheduled search.

In related art, Steudle discloses means for suppressing frequency switches during the scheduled search (figure 3; abstract; col. 5, lines 44 to col. 6, line 19; A gap is left for measuring inter-frequency parameters.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Steudle into the teachings of Amerga by optimizing the distribution of the measurement gaps between various mobile stations, the interference caused by mobile stations to each other at a higher transmission is reduced.

Consider **claim 21**, Amerga discloses processor readable media encoded with software operable to perform the following steps: scheduling a search (abstract; figures 2, 4-9; paragraphs 36-39), but fails to disclose suppressing frequency switches during the scheduled search.

In related art, Steudle discloses suppressing frequency switches during the scheduled search (figure 3; abstract; col. 5, lines 44 to col. 6, line 19; A gap is left for measuring inter-frequency parameters.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Steudle into the teachings of Amerga by optimizing the distribution of the measurement gaps between various mobile stations, the interference caused by mobile stations to each other at a higher transmission is reduced.

Consider **claim 2**, and as **applied to claim 1 above**, Amerga, as modified by Steudle, discloses the claimed invention wherein a gap manager for indicating when a frequency switch is to occur, and wherein the search scheduler schedules the search during a period of time without a frequency switch as indicated by the gap manager. (Steudle: figure 3; abstract; col. 5, lines 44 to col. 6, line 19)

Consider **claim 3**, and as **applied to claim 1 above**, Amerga, as modified by Steudle, discloses the claimed invention wherein the search scheduler comprises a timer, the expiration of which indicates a search is to be scheduled. (Amerga: abstract; figures 2, 4-9; paragraphs 36-39)

Consider **claim 4**, and as **applied to claim 3 above**, Amerga, as modified by Steudle, discloses the claimed invention wherein the search scheduler schedules a search without asserting the frequency switch blocking signal prior to the timer expiration. (Amerga: abstract;



figures 2, 4-9; paragraphs 36-39)

Consider **claim 5**, and **as applied to claim 3 above**, Amerga, as modified by Steudle, discloses the claimed invention wherein the timer resets upon the completion of a scheduled search. (Amerga: abstract; figures 2, 4-9; paragraphs 36-39; performing searches at new frequencies)

Consider **claim 6**, and **as applied to claim 3 above**, Amerga, as modified by Steudle, discloses the claimed invention wherein the search scheduler schedules a search and asserts the frequency switch blocking signal subsequent to the timer expiration. (Amerga: abstract; figures 2, 4-9; paragraphs 36-39)

Consider **claim 7**, and **as applied to claim 1 above**, Amerga, as modified by Steudle, discloses the claimed invention wherein the search scheduler asserts the frequency switch blocking signal during the scheduled search. (Amerga: abstract; figures 2, 4-9; paragraphs 36-39)

Consider **claim 8**, and **as applied to claim 2 above**, Amerga, as modified by Steudle, discloses the claimed invention wherein the search scheduler schedules a plurality of search types. (abstract; figures 2, 4-9; paragraphs 36-39)

Consider **claim 9**, and **as applied to claim 81 above**, Amerga, as modified by Steudle, discloses the claimed invention wherein the search scheduler schedules one or more of the plurality of search types (Amerga: abstract; figures 2, 4-9; paragraphs 36-39) in response to the frequency switch indicator received from the gap manager. (Steudle: figure 3; abstract; col. 5, lines 44 to col. 6, line 19)

Consider **claim 10**, and **as applied to claim 8 above**, Amerga, as modified by Steudle, discloses the claimed invention wherein the search scheduler comprises a plurality of timers corresponding to one or more of the plurality of search types, the expiration of each timer indicating a search of the respective search type is to be scheduled. (abstract; figures 2, 4-9; paragraphs 36-39)

Consider **claim 11**, and **as applied to claim 10 above**, Amerga, as modified by Steudle, discloses the claimed invention wherein the search scheduler schedules a search corresponding to one of the plurality of search types and asserts the frequency switch blocking signal subsequent to the respective timer expiration. (Amerga: abstract; figures 2, 4-9; paragraphs 36-39)

Consider **claim 12**, and **as applied to claim 8 above**, Amerga, as modified by Steudle, discloses the claimed invention wherein the plurality of search types comprises one or more of a list search, a W-CDMA step one search, or a W-CDMA step two search (Amerga: abstract)

Consider **claim 15**, and **as applied to claim 14 above**, Amerga, as modified by Steudle, discloses the claimed invention wherein frequency synthesizer to receive the frequency switch commands and to generate an output signal, the frequency of the output signal changing from a first frequency to a second frequency in response to the frequency switch commands. (Amerga: abstract; figures 2, 4-9; paragraphs 36-39)

Consider **claim 16**, and **as applied to claim 14 above**, Amerga, as modified by Steudle, discloses the claimed invention wherein a searcher for searching in accordance with the scheduled search and for indicating to the search scheduler when the scheduled search is complete. (Amerga: abstract; figures 2, 4-9; paragraphs 36-39)

Consider **claim 18**, and **as applied to claim 17 above**, Amerga, as modified by Steudle, discloses the claimed invention wherein determining future frequency switches; and wherein the search is scheduled during a time period in which no future frequency switches are determined. (Amerga: abstract; figures 2, 4-9; paragraphs 36-39)

Consider **claim 19**, and **as applied to claim 18 above**, Amerga, as modified by Steudle, discloses the claimed invention wherein timing the duration between searches; and scheduling searches without suppressing frequency switches prior to the timed duration reaching a pre-determined maximum. (Amerga: abstract; figures 2, 4-9; paragraphs 36-39)

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to:**

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P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Bobbak Safaipoor whose telephone number is (571) 270-1092. The Examiner can normally be reached on Monday-Friday from 9:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Bobbak Safaipoor/  
Examiner, Art Unit 2618

June 18, 2009

/Matthew D. Anderson/

Supervisory Patent Examiner, Art Unit 2618